LPDES PERMIT NO. LA0054691, AI No. 3401

STATEMENT OF BASIS
FOR THE DRAFT MODIFIED LOUISIANA POLLUTANT DISCHARGE ELIMINATION SYSTEM (LPDES) PERMIT TO DISCHARGE TO WATERS OF LOUISIANA

1. **Company/Facility Name:** Bayou Steel Corporation
Post Office Box 5000
LaPlace, LA 70069

2. **Issuing Office:** Louisiana Department of Environmental Quality (LDEQ)
Office of Environmental Services
Post Office Box 4313
Baton Rouge, Louisiana 70821-4313

3. **Prepared By:** Yvonne Baker

Date Prepared: January 30, 2007

4. **Permit Action/Status:**

A. Reason For Permit Action:
Proposed modification of an existing Louisiana Pollutant Discharge Elimination System (LPDES) permit for a 5-year term.

Proposed Modification:
The addition of non-contact cooling water and filter backwash to Outfall 003. See Rationale below.

B. LPDES permit - LPDES permit effective date: August 1, 2005
LPDES permit expiration date: July 31, 2010

C. Application received on November 6, 2006

5. **Facility Information:**

A. Location – 138 Highway 3217 in LaPlace
St. John the Baptist Parish

Latitude 30°02'25", Longitude 90°27'59"

B. FACILITY TYPE/ACTIVITY – steel manufacturing facility

This is an existing facility that manufactures steel products. Scrap metal is brought into the facility by barge, rail, or truck in a prepared or unprepared state. Prepared scrap is stored in the scrapyard or taken directly to the melt shop area. Unprepared scrap, in the form of automobile bodies, loose sheet, or light plate, is sent to an onsite shredding operation for processing. When shredded, the scrap is taken to an electric arc furnace (EAF) for melting.

The EAF steel melting process is a batch operation. Each batch is called a "heat" and includes charging scrap steel and alloys, melting, refining, and tapping of the liquid steel to a ladle. Each heat takes approximately 45 to 70 minutes to complete.

Once the scrap metal has been melted and refined, the steel is transferred into a ladle. The liquid steel contained in the ladle is transferred by a transfer car to the Ladle

Metallurgic Facility (LMF) for further refining, temperature control and staging prior to the casting process.

The refined steel ladle is transferred from the LMF to a continuous caster, which converts the liquid steel into solid form. Liquid steel is drained from the ladle into a continuous casting tundish, where it is then distributed evenly into billet molds. The individual molds are water cooled until the metal is solid on the outer surface. A continuous strand is slowly drawn from the mold and further cooled by water sprays. After cooling to a solid state the steel strand is cut with a cutting torch. The billets are then transferred to the finishing area where they are allowed to cool.

Billets are either sold as product, or further processed in the hot forming rolling mill. Hot forming of steel sections (angles, channels, flats, beams) begins by reheating the billets in a reheat furnace. Once heated to the appropriate temperature, the billets are rolled through a series of rolling mill stands to attain the proper dimensions. The structural shapes are then cut to length, bundled, and inventoried or shipped.

The facility is subject to the Iron and Steel Manufacturing Point Source Category Effluent Limitation Guidelines (ELG), Subpart F – Continuous Casting Subcategory, 40 CFR '420.60 and Subpart G – Hot Forming Subcategory, 40 CFR '420.70.

C. FEE RATE

1. Fee Rating Facility Type: Minor
2. Complexity Type: III
3. Wastewater Type: II
4. SIC code: 3312

6. Outfall Information

Outfall 003

Discharge Type: stormwater runoff, non-contact cooling water, and filter backwash
Treatment: none
Location: at the point of discharge to the ditch at the pipe fence on the south side of Highway 3217
Flow: intermittent (non-contact cooling water: ~100 – 200 GPD, filter backwash: ~ 40 – 60 GPD)
Discharge Route: to Lake Pontchartrain via local drainage

7. Receiving Waters

STREAM – Lake Pontchartrain

BASIN AND SEGMENT – Lake Pontchartrain Basin, Subsegment 041001

DESIGNATED USES - a. primary contact recreation
b. secondary contact recreation
c. propagation of fish and wildlife

8. TMDL Status

Subsegment 041001, Lake Pontchartrain – West Hwy. 11 Bridge (Estuarine), is listed on LDEQ's Final 2004 303(d) List as impaired for pathogen indicators and copper (EPA Category 5). To date no TMDLs have been completed for this waterbody. A reopener clause will be established in the permit to allow for the requirement of more stringent effluent limitations and requirements as imposed by a TMDL. Until completion of TMDLs for the Lake Pontchartrain Basin, those suspected causes for impairment which are not directly attributed to the steel manufacturing point source category have been eliminated in the formulation of effluent limitations and other requirements of this permit. Additionally, suspected causes of impairment which could be attributed to pollutants which were not determined to be discharged at a level which would cause, have the reasonable potential to cause or contribute to an excursion above any present state water quality standard were also eliminated.

Outfall 003 (stormwater runoff, non-contact cooling water, and filter backwash) does not have the potential to discharge pollutants associated with the pathogen indicators impairment. Therefore, pathogen indicators will not be limited in Outfall 003.

Outfall 003 does have the potential to discharge copper; however the volume of the discharge is too small to have a significant impact on the stream.

9. Compliance History/Comments

A. Compliance History

1. A Warning Letter, WE-L-04-0408, dated March 11, 2004, was issued to the facility as a result of the inspection conducted on May 23, 2003.

2. This Office received a letter in response to Warning Letter, WE-L-04-0408, on March 24, 2004. The letter included documentation of a conversation that took place on February 19, 2002 with Mitch Mitchell. It was noted on the conversation log that DMRs no longer had to be sent to the regional office.

3. On July 22, 2004, this Office was notified that a sewer surge tank overflow caused the release of 25 gallons of sewage.

4. On July 23, 2004, this Office was notified that approximately 400 gallons of diesel/water were released. The product was vacuumed and the impacted soil was excavated.

B. DMR Review/Excursions – DMRs were reviewed for years 2004, 2005, and 2006. All DMRs were submitted. No excursions were reported.

10. Endangered Species

The receiving waterbody, Subsegment 041001 of the Lake Pontchartrain Basin, has been identified by the U.S. Fish and Wildlife Service (FWS) as habitat for the migratory waterfowl, which is listed as an endangered species. LDEQ has not submitted this draft permit to the FWS for review in accordance with a letter dated September 29, 2006 from Watson (FWS) to Brown (LDEQ). As set forth in the Memorandum of Understanding between the LDEQ and the FWS, and based on information provided by the FWS, LDEQ has

determined that the issuance of the LPDES permit is not likely to have an adverse effect upon the migratory waterfowl. Effluent limitations are established in the permit to ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat. The more stringent of technology and water quality based limits (as applicable) have been applied to ensure maximum protection of the receiving water.

11. Historic Sites

The discharge is from an existing facility location, which does not include an expansion on undisturbed soils. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the "Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits" no consultation with the Louisiana State Historic Preservation Officer is required.

12. Tentative Determination:

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to modify the permit for the discharge described in the application.

13. Public Notices:

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List

Rationale for Bayou Steel Corporation

PHASE I INTERIM LIMITS
From the Modification Effective Date to Upon Commencement of Discharge

1. **Outfall 003** the discharge of stormwater runoff, non-contact cooling water, and filter backwash (intermittent).

Pollutant	Limitation Mo. Avg: Daily Max (mg/l)	Reference
Flow (MGD)	Report: Report	LAC 33:IX.27071.I.1.b.
Mercury	Report: Report	BPJ

Treatment: sand filters

Monitoring Frequency: 1/6 months for mercury and flow at the point of discharge to the ditch at the pipe fence on the south side of Highway 3217.

Limits Justification: A report requirement for mercury was included based on BPJ because there is concern with mercury from emissions from the facility settling on the ground and discharging to waters of the state via stormwater runoff.

PHASE II INTERIM LIMITS
From Upon Commencement of Discharge to the Permit Expiration Date

2. **Outfall 003** the discharge of stormwater runoff, non-contact cooling water, and filter backwash (intermittent).

Pollutant	Limitation Mo. Avg: Daily Max (mg/l)	Reference
Flow (MGD)	Report: Report	LAC 33:IX.27071.I.1.b.
Mercury	Report: Report	BPJ
TSS[1]	---:45	Similar Discharges*; LAG380000
Clarifying Agents Used[1]	Record: ---	Similar Discharges*; LAG380000
pH[2]	6 s.u. to 9 s.u.	Similar Discharges*; LAG480000

1 Parameters were placed in the permit due to the filter backwash
2 Parameter was placed in the permit due to the non-contact cooling water

Treatment: sand filters

Monitoring Frequency: 1/6 months for mercury 1/quarter for flow, TSS, Clarifying Agents Used, and pH at the point of discharge to the ditch at the pipe fence on the south side of Highway 3217.

Limits Justification: The pH limitation and monitoring frequency is based on current guidance for similar discharges and the General Permit for Light Commercial Facilities, LAG4800000 effective August 1, 2001. Temperature was not included because the volume of non-contact cooling water is low and the distance to the receiving stream is great; therefore it should not have a significant impact on the receiving stream. The TSS and Clarifying Agents Used limitations and monitoring frequencies are based on current guidance for similar discharges from other facilities and the Potable Water Treatment Plant General Permit, LAG380000 effective January 1, 2005. A report requirement for mercury was included based on BPJ because there is concern with mercury from emissions from the facility settling on the ground and discharging to waters of the state via stormwater runoff.

The type and daily average discharge expressed in lb/day or gal/day of each clarifying agent used in the intake raw river water treatment clarification system during the sampling month shall be recorded. Records of the quantity and type of clarifying agents used shall be retained for three years in accordance with Part III C.3. No DMR reporting shall be required.

* Existing permits for similar outfalls
s.u. Standard Units

NOTE

For outfalls containing concentration limits, the usage of concentration limits is based on BPJ for similar outfalls since the flow is variable and estimated.